Permit No.:	Site Location:	Permittee:	Date:	Time On-Site
TNR153856	3000 Norfolk Southern Way, Rossville, Fayette Co., TN	Norfolk Southern Railway	Aug. 18, 2015	01:30 PM

Photo No. Prepared by: 1 Cliff Caudle

Description

View southwest across
Permanent Basin 4. Lower
slopes previously observed to
be unstable and gullied had
been re-graded and re-seeded,
but lacked full growth in a few
places around the outfall
structure. A stone filter ring had
been placed immediately upgradient from the intake to the
slotted box culvert to provide
velocity dissipation and
promote settlement of potential
suspended sediment.
(Compare photo 1 – May 6, 2016



Photo No.	Photographer
2	Cliff Caudle

Description

inspection)

Additional view southwest across Permanent Basin 4. The bench above and north of the outfall structure had been regraded and revegetated, and the flow path from the bench to the outfall had been riprapped for stability (yellow arrow). Note the northern end of the rip-rap shown in photo 3 below (red arrow).

(Compare photo 1 – May 6, 2016 inspection)



Permit No.:	Site Location:	Permittee:	Date:	Time On-Site
TNR153856	3000 Norfolk Southern Way, Rossville, Fayette Co., TN	Norfolk Southern Railway	Aug. 18, 2015	01:30 PM

Photo No. Photographer 3 Cliff Caudle

Description

View north from the south end of Permanent Basin 4 showing stabilization of the low-flow channel with rip-rap and revegetation of slopes.

(North end of low flow channel shown in Photo 1 – May 6, 2016 inspection)



Photo No.	Photographer
4	Cliff Caudle

Description

Additional view from the north end of Permanent Basin 4 - view south showing re-grading and effective revegetation of basin slopes up-gradient of the slotted outfall structure (arrow).



Permit No.:	Site Location:	Permittee:	Date:	Time On-Site
TNR153856	3000 Norfolk Southern Way, Rossville, Fayette Co., TN	Norfolk Southern Railway	Aug. 18, 2015	01:30 PM

Photo No. Photographer 5 Cliff Caudle

Description

View east showing the rip-rap flume down the large eastern slope that had failed near light pole 115. No additional work had been performed here, but some natural revegetation had occurred since the May 6, 2016 inspection.

(Compare photo 2 – May 6, 2016 inspection)



Photo No.	Photographer
6	Cliff Caudle

Description

View northeast showing the area of sediment accumulation below the rip-rap flume shown in photo 2. Natural revegetation had progressed on the sediment at the toe of the slope.

(Compare photo 3 – May 6, 2016 inspection)



Permit No.:	Site Location:	Permittee:	Date:	Time On-Site
TNR153856	3000 Norfolk Southern Way, Rossville, Fayette Co., TN	Norfolk Southern Railway	Aug. 18, 2015	01:30 PM

Photo No. Photographer 7 Cliff Caudle

Description

View east showing the slump slope failure that had occurred near light pole 125. The slump had been repaired with rip-rap and the sediment that had previously accumulated below the slump had been removed to restore channel flow at the toe of the slope. The restored flow line at the toe of the slope has a mostly sandy bottom.

(Compare photo 4 – May 6, 2016 inspection)



Photo No.	Photographer
8	Cliff Caudle

Description

View eastward showing the large, sparsely vegetated area in the vicinity of light pole 129 above the eastern conveyance, noted in the May 6, 2016 inspection. Some revegetation of the lower slope had occurred, but the upper slope remained unstable.

(Compare photo 6 – May 6, 2016 inspection)



Permit No.:	Site Location:	Permittee:	Date:	Time On-Site
TNR153856	3000 Norfolk Southern Way, Rossville, Fayette Co., TN	Norfolk Southern Railway	Aug. 18, 2015	01:30 PM

Photo No. Photographer 9 Cliff Caudle

Description

View west showing a formerly unstable, gullied portion of the west slope in the Pipe 12 drainage west of Permanent Basin 4. The area had been regraded, the gullied area had been stabilized with rip-rap, and the area overall was very well-vegetated.



Photo No.	Photographer
10	Cliff Caudle

Description

View east showing a formerly unstable portion of the east slope above the low-flow channel in Permanent Basin 4. The area had been regraded and re-seeded, and was very well-vegetated.



Permit No.:	Site Location:	Permittee:	Date:	Time On-Site
TNR153856	3000 Norfolk Southern Way, Rossville, Fayette Co., TN	Norfolk Southern Railway	Aug. 18, 2015	01:30 PM

Photo No. Photographer 11 Cliff Caudle

Description

The area around Outfall SW9 (the discharge point to Stream 5) was mostly well vegetated.



Photo No.	Photographer
12	Cliff Caudle

Description

View east across the north end of Permanent Basin 3, which was mostly well-vegetated.

